

## **Wyoming Landscape Conservation Initiative** **Concept Paper**

**Executive Summary:** Southwest Wyoming offers world-class energy and wildlife resources and provides an excellent opportunity for developing new approaches to landscape conservation. The Bureau of Land Management (BLM), the U.S. Fish and Wildlife Service (FWS), the Wyoming Game and Fish Department (WGFD), the U.S. Forest Service (FS) and the U.S. Geological Survey (USGS), the National Park Service (NPS), and the Bureau of Reclamation (BOR) are developing a proposal to implement the Wyoming Landscape Conservation Initiative (WLCI), a long-term, science based, collaborative effort to ensure Wyoming's wildlife and their habitats are fully considered and addressed in the face of increasing land use pressures in Wyoming.

The WLCI will initially focus on Southwest Wyoming, which is primarily composed of public lands (Map 1). This area encompasses approximately 15 million acres; an area the total size of Connecticut, Delaware, Massachusetts, and New Hampshire combined, and contains approximately 85 trillion cubic feet of recoverable natural gas. The annual U.S. consumption of natural gas is about 23 trillion cubic feet. Estimated populations of wildlife in the area include 100,000 deer, 40,000 elk, 100,000 pronghorn antelope, 8,000 moose, 1,400 bighorn sheep, and the highest density of the greater sage-grouse within their western range. Additionally, Southwest Wyoming has 151 non-game species of greatest conservation need due to declining populations and habitats.

This proposal will address all fish and wildlife, including species where their populations are declining or restricted in numbers and/or distribution and where their habitats are being negatively impacted. The WLCI will focus on areas that, based on current knowledge, are not expected to be affected by major future developments through a program of habitat improvements, acquisition of conservation easements, etc. In addition, through information sharing, the WLCI will facilitate implementation of energy development reclamation and mitigation required by industry.

If successful, this concept would be easily adaptable to other areas in the country.

**Goal:** The goal of the WLCI is to conserve world-class wildlife resources and facilitate responsible development of critical energy resources.

### **Scale of Initiative:**

Several of the most intact, native ecosystems remaining in the Intermountain West are found within Wyoming, including sagebrush steppe, mixed mountain shrub, aspen, and riparian community types. Each provides valuable and unique fish and wildlife habitats. The greatest conservation value emerges when a mix of these community types is considered together within a healthy watershed, or at a landscape level. Landscape, for the purposes of this initiative, refers to a land area composed of a diversity of habitat types which encompass year-around fish and wildlife needs (e.g. summer and winter ranges). The size of a landscape area used by wildlife is dependent on the particular species of wildlife. For example, some pronghorn antelope migrate 200 miles through the Green River Basin, crossing all of the above-mentioned habitat types. Additionally, the greater sage-grouse will migrate several miles between required suitable seasonal habitats, with some populations migrating as much as 40 miles. All types of habitats used within a landscape are essential for wildlife to find food, shelter, and raise young.

**Background:** Development of energy resources is occurring, and will continue to occur at a pace that is unprecedented in Wyoming's history. Combined with increased residential and

industrial development, this fast paced activity is resulting in habitat losses, habitat degradation, wildlife avoidance of developing areas, and habitat fragmentation caused from new roads, road traffic, drill pads, drilling rigs, service units, pipelines, power lines, fencing, water pits, water wells, increased human activity, and dust, among other impacts. The result is the long-term loss of wildlife and fisheries habitat quantity and quality. This initiative will address these concerns in Southwest Wyoming while allowing for responsible resource development.

To meet these challenges, land and wildlife managers need to plan on a landscape basis and implement habitat improvements, and monitor species and habitat in concert with the on-and off-site mitigation and reclamation efforts required of the oil and gas industry. This initiative is being developed to coordinate various agency efforts to leverage personnel and funding to prevent the overall loss of quantity and quality of wildlife habitat.

The basic foundation, or platform, of habitat information for the Wyoming Landscape Conservation Initiative will be Wyoming Game and Fish Department's Comprehensive Wildlife Action Plan (CWAP), Strategic Habitat Plan, Wyoming Sage-Grouse Conservation Plan (along with local working group plans), and other departmental action plans. At least five BLM resource management plans and another 25-plus activity plans (e.g., habitat management plans (HMPs) and cooperative management agreements [CMAs]) also describe habitat management opportunities. Numerous NEPA documents and biological opinions also provide a source of habitat management proposals and management opportunities. All of these efforts will provide the base source for habitat management proposals.

**Proposal:** This initiative will provide the means to conduct efficient science-based terrestrial and aquatic habitat enhancement work, and species monitoring and conservation work. Projects will be initiated in areas with the greatest potential for benefit to fisheries and wildlife considering future leasing potential, land ownership pattern, and wildlife values, and will facilitate best reclamation and mitigation practices for impacted areas.

As an example, the existing oil and gas development areas and priority habitat areas were mapped to identify priority habitat enhancement areas on a broad landscape scale (Map 2). Through this initiative, existing data will be integrated with new knowledge energy resources to forecast future energy development, which will assist in habitat conservation planning. Exchange of information, data and research findings between affected and involved partners will be coordinated with, and be very beneficial to, all land use proponents and managers in southwest Wyoming.

This effort is currently limited to southwest Wyoming due to the public land ownership patterns (Map 1), which will facilitate management options, the interest of large energy corporations to serve as partners, and the existing abundance of fish, wildlife and habitat data being collected as a result of extensive energy development. This concept will be adaptable to other ecosystems within Wyoming and other states. It can also be expanded to include areas that cross jurisdictional boundaries.

The goal of this initiative is to implement a landscape-scale, science-based, long-term cooperative program in southwest Wyoming that will ensure conservation and viability of world-class wildlife resources. Members of the WLCI have proposed the following strategies:

- Develop an implementation strategy, based on an accepted science plan, to:
  - Develop Best Management Practices (BMPs);
  - Develop and implement effective monitoring strategies and protocols;
  - Apply adaptive management as indicated by monitoring results;
  - Facilitate data information and information sharing between and among all partners;
  - Provide guidelines for cooperating agencies and other partners;

- Encompass public participation; and
- Establish criteria for project selection and funding.
- Leverage efforts through public and private partnerships for long-term funding;
- Use existing and new data to identify priority management and research opportunities;
- Implement projects to help ensure species of greatest conservation need, as identified in Wyoming's CWAP, are conserved so listing under the Endangered Species Act is not necessary;
- Implement projects so the status of threatened, endangered, and other species affected by energy development (e.g. greater sage-grouse, mule deer, and pronghorn antelope), and other impacting activities are sustained or improved;
- Implement fish and wildlife habitat conservation efforts in all habitat types, while emphasizing sagebrush, mixed mountain shrub, riparian, and aspen habitat types.
- Implement projects that will lead to the conservation or enhancement of healthy watersheds and provide benefits to multiple species;
- Promote connectivity of fish and wildlife habitats; and
- Provide information and resources needed to facilitate responsible energy development while promoting world-class wildlife resources.

**Implementation:** The WLCI would help ensure that partners responsible for managing Wyoming's fish and wildlife and their habitats have the necessary resources to sustain/improve habitat conditions, species distributions, and viability on a broad scale. This effort would also complement habitat reclamation and mitigation efforts required of energy development companies.

Implementation will require long-term funding to establish the necessary staffing levels and for planning and implementation. WLCI was modeled after Alaska's successful North Slope Science Initiative, and is similar to the existing Jonah Interagency Office (JIO).

**Funding Source:** The funding source for the WLCI has not yet been identified but needs to be long-term and may include new state and federal appropriations, an endowment, special mitigation accounts (e.g., JIO mitigation funds, etc.), trusts, Non- Governmental Organizations, industry contributions, and other independent donations.

**Related Efforts:** The Wyoming Landscape Conservation Initiative is not intended as an alternative or substitute for reclamation and required mitigation actions by industry, or as a replacement for existing efforts occurring within the geographical area of this proposal (e.g. local sage-grouse working groups, etc.). Rather, development and implementation of the above-listed strategies will complement, and enhance existing efforts, such as the Wyoming Basin Ecoregional Assessment, the Western Association of Fish and Wildlife Agencies' (WAFWA) Greater Sage-grouse and Sagebrush Habitats Conservation Strategy, National Monitoring Strategy, etc.

The following components are considered critical in the successful implementation of this initiative:

1. Funding, staffing, and organizational plan to provide the means to support and implement this effort;
2. A Science Plan which will identify existing and additional information required for fish and wildlife habitat enhancement, species monitoring and conservation work. This plan will also outline how information/data gaps will be addressed including new techniques to ensure successful reclamation;
3. An Information Management Plan to facilitate data and information exchange within and amongst all partners; and
4. A communication plan to share information with interested parties.

(Please see attached documents for more detailed information)